APPENDIX 3-18

WATER DEPLETION

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1. Mining Process Water

   Water lost due to use in mining process - measured as percentage moisture of coal hauled to customer. 2,000,000 tons/yr x 2% = 29.4 acre feet

2. Ventilation Evaporation

   Water lost due to ventilation currents drying out mine water.

   Estimated at 2.5 gallons per million cfm annually.

   Estimated maximum 1,000,000 million cfm at 2.5 gallons = 40 acre feet.

3. Sediment Pond Evaporation

   Water lost to evaporation in sediment pond.

   Estimated to be one acre foot per year.

4. Subsidence Effect on Springs

   Estimated at zero because of no known effects of spring disruption.

5. Direct Use

   Pumped from creek for crusher building use - goes into sediment pond.

   Estimated at 2 acre feet per year in use but is not actually lost. Assume no loss.

6. Alluvial Loss

   None

7. Deep Aquifer Pumpage

   None

8. Mine Discharge

   Genwal has discharged at 500 gpm (approximately 800 acre feet per year) for the past 6 years. This is all old water according to the Mayo age dating studies. This is water that enters the watershed, therefore there is presently a net gain to the watershed of more than 700 acre feet:
   800 - (29.4 + 40 + 1) = 800 ac.ft. added, less 70.4 ac.ft. depleted = 729.6 ac.ft.